

Recall Campaign Bulletin



Mercedes-Benz

Campaign No. 2022050015, May 2022

Revision I: 05/23/2024

TO: ALL MERCEDES-BENZ CENTERS

SUBJECT: **Model GL-Class, ML-Class, and R-Class (X164, W164 and 251 platform)
Model Year 2006-2012**

Inspect Brake Booster – without Pedal Rework

Mercedes-Benz AG (“MBAG”), the manufacturer of Mercedes-Benz vehicles, has determined that on certain Model Year (“MY”) 2006-2012 ML-Class, GL-Class (W164/X164 platform) and R-Class (V251 platform) vehicles, the function of the brake booster might be affected due to advanced corrosion in the joint area of its housing. After extended time in the field and in conjunction with prolonged water exposure, this corrosion might lead to a vacuum leak at the brake booster. If this were to occur, the brake force support might be reduced, leading to an increase in the brake pedal forces required to decelerate the vehicle, and/or increased stopping distances. Additionally, in rare cases of very severe corrosion, it might be possible for a particularly strong or hard brake application to cause mechanical damage in the brake booster, whereby the connection between brake pedal and brake system would fail. In such a very rare case, it would not be possible to decelerate the vehicle via the brake pedal. The risk of a crash or injury would be increased. The function of the parking brake is not affected by this issue. Before the issue occurs, the driver might notice a change in the brake pedal feel and/or hissing/airflow noises when applying the brake pedal. An authorized Mercedes-Benz dealer will remove the rubber sleeve from the brake booster housing, inspect the brake booster on the affected vehicles and, depending on the result of this inspection, replace as necessary.

Prior to performing this Campaign:

- VMI must be checked before performing campaigns to verify that the campaign is required on a specific vehicle. Always check for any other open campaigns and perform accordingly.
- Please review the entire Campaign bulletin and follow the repair procedure exactly as described.

Approximately 335,273 vehicles are affected.

Order No. P-RC-2022050015

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Record

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Inspect Brake Booster

Modification notes

- Note on scope of work added (model 164.195 hybrid and TIPS case)

i Existing problems that would hinder the inspection procedure or any subsequent repairs must first be rectified and are the responsibility of the customer. Any associated costs are not claimable and should not be included with the campaign claim.

i Before starting work, there must be **no** fault message present in the instrument cluster for the brake system. If a fault message is present before starting work, it must be rectified and is the responsibility of the customer. Any associated costs are not claimable and should not be included with the campaign claim.

Check/Test Procedure A–visual inspection only

- Open the hood and check the water drains (**marking, Figure 1**) for correct installation and ability to drain.

i Only for model 251

i Clean and correctly install water drains if necessary.



Figure 1

2. Remove the rubber sleeve wrapped around the brake booster (A, Figure 2) with a suitable tool (hook and side cutting pliers).
 - i** If the rubber sleeve on the brake booster is missing or *not* present, then continue with **check/test procedure A1**.
 - i** The rubber sleeve should be separated above the barcode label on the brake booster as seen in (A, Figure 2).

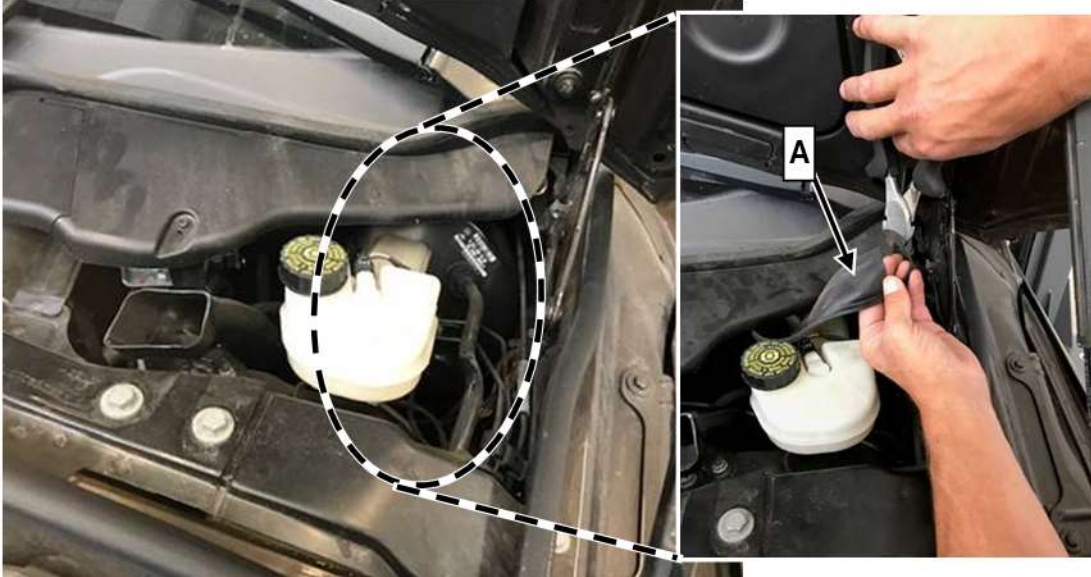


Figure 2

3. Take a photo of the rubber sleeve with the VIN label of the B-pillar (A, Figures 3 and 4) and store to a local HDD/computer storage location with the vehicle service file and attach it to the warranty claim in EVA.
 - i** These pictures serve as documentation of the current condition of the brake booster.



Figure 3

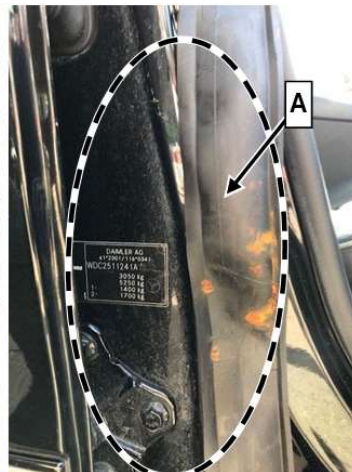


Figure 4

4. Check corrosion of the brake booster using the removed rubber sleeve.

i Use (Figures 5, 6 and 7) to assess corrosion.

i **Brake booster (OK):**

Multiple point-shaped corrosion marks (Figure 5) are permissible.

A maximum of **one point-shaped corrosion mark** with a diameter **greater than 15 mm** (Figures 6 and 7) is permitted.



Figure 5 (OK)



Figure 6 (OK)



Figure 7 (OK)

i **Brake booster (Not OK):**

Widespread corrosion marks spanning the rubber sleeve are not permissible.

More than one corrosion mark with a diameter greater than 15 mm is not permissible.

- a. Corrosion measurements **Exceeds thresholds-Not OK: Carry out work procedure**
- b. Corrosion measurements **Does not exceed threshold-OK (Figures 5, 6 or 7): End measure.**

i If the measure is ended, **do not** re-install a rubber sleeve. Apply marking with **white touch-up paint pen** (1, Figure 10) to the brake booster checked.

i Under no circumstances should you treat the brake booster with an anti-corrosion agent.

i The findings from the Check/Test Procedure must be documented on the Repair Order and included in the dealer text in the warranty claim in EVA.

Check/Test Procedure A1 - visual inspection only if no rubber sleeve is present

i Only if the rubber sleeve of the brake booster is missing.

1. Take a photo of the barcode label (**B, Figure 8**) on the brake booster and store to a local HDD/computer storage location with the vehicle service file and attach to the warranty claim in EVA.



Figure 8

2. Check sequence of numbers on the barcode label (**C**, Figure 9).
 - a. If the numeric sequence between the 13th and 17th digits are **less than** "15126":
Carry out **Work Procedure below**.
 - b. If the numeric sequence between the 13th and 17th digits are **greater than or equal to** "15126":
End measure.

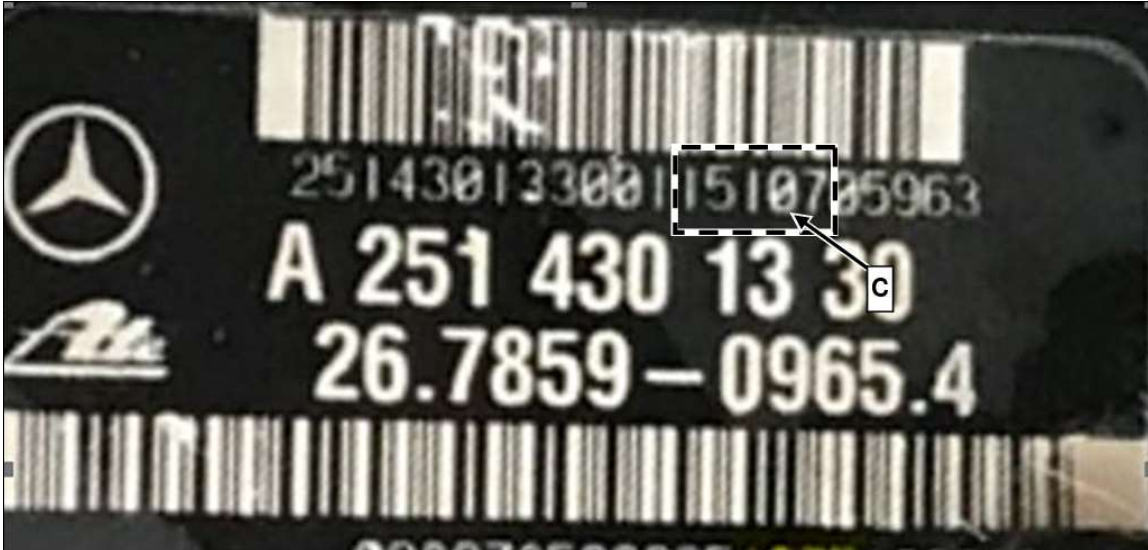


Figure 9

3. Apply marking with **white touch-up paint pen (1, Figure 10)** to the inspected brake booster.

i Under no circumstances should you treat the brake booster with anti-corrosion agent/paint.



Figure 10

Work procedure

- i** **Note for model 164.195 (hybrid):**
Do **not** replace brake booster. A repair approval must be obtained from GCSP/TPC via a **TIPS case**.
Open a TIPS case with pictures of your findings from Check/Test Procedures.

- i** The new brake booster contains a small parts kit (**Figure 11**).



Figure 11

1. Replace brake booster.

- i** Model 164: For basic data, see AR43.10-P-0350GZ.
Model 251: For basic data, see AR43.10-P-0350RT.

- i** The BAS diaphragm travel sensor **must** be reused.

2. Once the old brake booster has been removed from the vehicle, transfer the BAS diaphragm travel sensor to the new brake booster.

- i** Model 164: For basic data, see AR42.31-P-6002GZ.

- i** Model 251: For basic data, see AR42.31-P-6002RT.

3. Check for correct function of brake lights.

4. Read out serial number (**Figure 12**) using the **Mercedes-Benz PartScan** app.

i The serial number is automatically entered in VeDoc.
Verify the VIN reads from the vehicle correctly.



Figure 12

i To prepare for the work procedure, the **Mercedes-Benz PartScan** app must be installed on an Apple® iPhone® or Android® smartphone.

i A mobile Internet connection is required for installing and transmitting the data.

i Download the app from the Apple® Store for iPhone® or Google® Play for Android® (download is similar to other apps).

After downloading, a one-time login authentication must be performed via an encrypted QR code (follow instructions on screen). The required QR code (**Figure 13**) can be scanned here from the work instructions. Ensure that only authorized workshop personnel have access to the QR code!

i In the case the PartScan app cannot be used a XSF ticket for the documentation has to be created and noted on the workshop order.

The use of the **Mercedes-Benz PartScan** app is recommended to simplify redocumentation and avoid input errors.

i In the case of a redocumentation with the Mercedes-Benz PartScan app, no additional documentation must be carried out in VeDoc.



Figure 13 (QR code)

Primary Parts Information

Qty.	Part Name	Part Number
As required (1)	Brake booster (not valid for model 164.195 hybrid)	A 251 430 00 00
As required	Brake fluid	*

* The replacement parts must be determined according to the equipment variant for the vehicle identification number via the parts process in the Xentry Portal.

i Small parts such as screws, lock nuts, sealing rings, cable ties, fluids, sealant, etc. are not listed in the parts list. The required small parts are taken into account in the budgeting.

Warranty Information

i **Note:** The following allowable labor operation should be used when submitting a warranty claim for this repair:

Damage Code	Operation Number	Description	Labor Time (hrs.)
42 900 05	02-0053	Check/test procedure A Check brake unit Includes: Remove rubber sleeve from brake unit and document test result This operation number can be used even if no rubber sleeve is present on the brake unit	0.2
	02-0088	Check/test procedure A1 Check barcode on brake unit Only if no rubber sleeve is present on the brake unit	0.1
	12-1649	Replace brake unit (after check) Model 164 Includes: Modify travel sensor for brake unit and bleed brake system	2.0
	12-1649	Replace brake unit (after check) Model 251 Includes: Modify travel sensor for brake unit and bleed brake system	2.4

i **Note:** Always check Xentry Operation Time (XOT) for the current OP-Code times. Labor times are subject to change and updates may not be reflected in this document.